# FINDING OF NO SIGNIFICANT IMPACT AND DECISION RECORD (FONSI/DR)

# FOR EnCana Oil & Gas (USA) Inc FIGURE FOUR UNIT GEOGRAPHIC AREA PLAN (GAP)

# White River Field Office, Colorado CO-WRFO-03-187 EA

<u>Finding of No Significant Impact</u>: The environmental assessment analyzing the environmental effects of the proposed action and alternatives has been reviewed. The approved mitigation measures result in a <u>Finding of No Significant Impact</u> on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

<u>Decision and Rationale:</u> It is my decision to approve the proposed action (Figure Four Unit Geographic Area Plan for 120 well pads) as written (changes to the original September 2003 Figure Four Unit Geographic Area Plan are listed below) in order to provide for the orderly, economical and environmentally sound exploration and development of oil and gas resources on valid oil and gas leases.

This decision does not modify any lease terms and stipulations attached to the specific leases involved. Updates and amendments to the Geographic Area Plan (GAP) may be made over the course of the 4 year drilling program. Depending on the magnitude of the changes in the future, additional NEPA compliance documentation may be necessary if it is determined to be outside the scope of this analysis.

After reviewing the original GAP and conducting on-sites visits, the following changes were made, carried forward and analyzed in the proposed action:

Access roads and pipeline routes were changed; the proposed access roads and pipelines are shown in Figures 2-3 and 3-3 of the environmental document.

Relocation of Well Pads for Avoidance of Raptor Nests

Pad #	Pad Location	Rationale for Pad Movement
7	NWSW 2-4S-98W	Avoid pinyon/juniper by moving pad west away from ridgeline
11	NWNW 7-4S-98W	Avoid aspen to west along access road and pad
19	NWSW 9-4S-98W	Avoid aspen along access road
50	SWSE 15-4S-98W	Avoid aspen grove to north by moving pad to south if possible
55	SWSW 16-4S-98W	From Pad #72 access road should run along east side of ridge to avoid
56	SWSE 16-4S-98W	From split to Pad #77 keep road on east side of ridge to avoid aspens
62	NENW 18-4S-98W	Avoid aspen to north by moving pad to south as possible
64	NESW 18-4S-98W	Avoid aspens along access road route
72	NESE 20-4S-98W	Minimize aspen grove disturbance by moving access road west off of ridge
73	SWNE 20-4S-98W	Avoid aspen by moving pad as far west as possible

Pad #	Pad Location	Rationale for Pad Movement
75	SWSE 21-4S-98W	Access road should be offset to west side of ridge still avoiding aspen
76	NWSE 21-4S-98W	Access road should be offset to west side of ridge still avoiding aspen
78	NENW 22-4S-98W	Avoid aspen grove to north
79	NWSW 22-4S-98W	Avoid aspen grove to north by moving pad south as possible
82	SWNE 22-4S-98W	Avoid aspen grove to NE, move pad SW if possible
90	SWSW 24-4S-98W	Avoid aspens to east by moving pad west if possible
94	SESE 25-4S-98W	Avoid aspen to west by moving pad east if possible
95	SWNE 25-4S-98W	Avoid aspen grove in saddle to the south by moving pad to north
99	SWSW 26-4S-98W	Avoid aspens if possible by moving pad to north; access pad from Pad
104	NWSW 27-4S-98W	Avoid aspen by moving pad to south as close to road as possible
105	SWSE 27-4S-98W	Move pad to north to avoid aspen to south
107	SENW 28-4S-98W	Avoid aspen groves as possible
108	NWSW 28-4S-98W	Avoid aspen and sagebrush by moving pad to south into serviceberry
109	NESE 28-4S-98W	Avoid aspen grove on N. side by moving pad to south if possible
114	SENE 29-4S-98W	Avoid aspen by moving pad to south and reroute top ridge road around pad
121	NENW 36-4S-98W	Avoid aspens to west by moving pad east as possible
122	SWNW 36-4S-98W	Avoid aspens to west by moving pad to east as possible

Relocation of Well Pads for Avoidance of Sage Grouse

Pad	Pad Location	Rationale for Pad Movement
66	NWNW 19-4S-98W	Avoid sagebrush habitat by moving pad as far west as possible
67	SESW 19-4S-98W	Avoid primary sage grouse habitat by moving pad south as close to road as possible
68	SWSE 19-4S-98W	Avoid primary sage grouse habitat by moving pad south as close to road as possible
71	SWSW 20-4S-98W	Avoid primary sage grouse habitat by moving pad south as close to road as possible
105	SWSE 27-4S-98W	Avoid dense sagebrush on top by moving pad to north as possible w/out clearing aspens
108	NWSW 28-4S-98W	Avoid aspen and sagebrush by moving pad to south into serviceberry
112	SWSW 29-4S-98W	Avoid sagebrush habitat by moving pad east as close to road as possible
116	SENW 35-4S-98W	Avoid sage grouse habitat by moving pad to south near main road

Prior to any approval of the applications for permit to drill (APDs) referenced in this GAP, the operator must provide the BLM signed certification statements from surface landowners documenting that agreements have been obtained for road use and maintenance on private roads accessing well pads and facilities on BLM land.

# **RATIONALE**:

- 1. Approval of the proposed action is validating the rights granted with the federal oil and gas leases to develop the leasehold to provide commercial commodities of oil and gas.
- 2. The environmental impacts have been mitigated with measures outlined in the body of the Environmental Assessment and listed below.
- 3. The proposed action is in conformance with the White River Record of Decision and Approved Resource Management Plan dated July 1, 1997

<u>Mitigation Measures</u>: All applicable surface stipulations and conditions of approval (COAs) described in Appendix A and B of the White River ROD/RMP BLM July 1, 1997 shall be implemented along with the following additional COAs:

## Soils

Mitigation of the potential for petroleum contamination of soils shall include regular inspection of project facilities for the presence of leaks or spills. If soil contamination is discovered, the BLM and required agencies shall be notified immediately and remediation of the contamination conducted. For soils, this remediation could consist of excavation of the impacted soils, transport of the contaminated soils to a facility licensed to accept petroleum-contaminated soils, and backfilling of the excavation with clean fill.

#### **Surface Water**

Conduct regular inspection of well pads, including topsoil stockpiles (if present), cut- and fill-slopes, roads, and pipeline corridors for signs of erosion and runoff problems. Problem locations shall be stabilized and seeded as appropriate to prevent additional erosion and potential impacts to receiving waters, and regular inspection of sediment control structures, drainage structures, and culverts for signs of failure or malfunction and repair of those facilities.

#### Groundwater

The use of either produced water or reuse of drilling fluids for subsequent well drilling shall not occur before surface casing has been cemented in place and freshwater zones isolated and protected.

Conduct regular inspection of project facilities containing hydrocarbons, such as tanks, wellheads, and above-ground piping to identify any potential leaks.

# **Air Quality**

Mitigation of air quality impacts shall be accomplished through the permitting of all regulated air pollution sources through the Colorado Department of Public Health and Environment, Air Pollution Control Division. The construction and operating permitting processes, where applicable (compressor engines, large glycol dehydration units), typically require the use of clean burning engines and emissions controls to reduce air pollution emissions and impacts to air quality.

To reduce the emission of fugitive dust from access roads in the Project Area, routine road watering and/or application of magnesium chloride shall be carried out when the roads are dry.

#### Noise

All compressors shall be equipped with hospital type mufflers. In addition, if a compressor station

is to be located closer than 400 feet to an existing residence or other sensitive receptor, it shall be sited to take advantage of naturally-occurring obstacles or shall be constructed with man-made obstacles in the direct path between the noise source and the receiver. These natural or man-made obstacles must be high enough to break the line-of-sight between the compressor station and the residence/noise receptor. Man-made obstacles can be tightly spaced wood fences (no gaps in the wood panels), concrete fences, or earthen berms.

# **Special Status Plants**

Field surveys for sensitive plants and wetlands shall be conducted prior to any project-related surface disturbance. Resources identified during these surveys shall be avoided or impacts to them shall be minimized through compliance with applicable surface stipulations, COAs, or permit conditions. Surveys shall be conducted by a qualified botanist(s).

To reduce the potential for collection of sensitive plant species by third parties, access roads shall be closed to public access through installation of locked gates, where recommended by the BLM.

### **Noxious Weeds**

EnCana and their contractors will power-wash all construction equipment and vehicles prior to the start of construction. Any construction or operational vehicles traveling between the project location and outside areas shall be power-washed on a weekly basis. This shall reduce the probability that invasive weed seeds shall be introduced into the Project Area from infested locations.

During the construction phase of the project, EnCana shall implement an intensive reclamation and weed control program after each segment of project completion. EnCana shall revegetate in all portions of well pads and the ROW not utilized for the operational phase of the project, as well as any sites within the Project Area determined necessary by the BLM. Reseeding shall be accomplished using native plant species indigenous to the Project Area. Post-construction seeding applications shall continue until determined successful by the BLM. Weed control shall be conducted through an Approved Pesticide Use and Weed Control Plan from the Authorized Officer. Weed monitoring and reclamation measures shall be continued on an annual basis (or as frequently as the Authorized Officer determines) throughout the 20 to 30 year life of the project.

# **Rangeland Resources and Grazing**

As part of its construction of drainage ditches at various locations in the Project Area, EnCana will install water catchments/earthen impoundments to collect and pond runoff to improve livestock range conditions.

## Wetlands

Field surveys for wetlands shall be conducted and appropriate permits shall be obtained from the Corps of Engineer (COE) prior to any project-related surface disturbance. Wetlands and associated riparian vegetation identified during these surveys shall be avoided or impacts to them shall be minimized through compliance with applicable surface stipulations, COAs, or permit conditions. Surveys shall be conducted by a qualified botanist or wetland ecologist.

#### Wildlife

All EnCana and contract employees shall be prohibited from carrying firearms or bringing dogs to the Project Area.

In order to reduce incidents of illegal kill and harassment of wildlife, all EnCana personnel and contract employees shall be instructed on BLM regulations and state wildlife laws. Personnel shall also be instructed at a pre-construction meeting about the nature of the wildlife species that occur on the work site, potential impacts to these species, and measures that shall be taken to avoid or minimize impacts.

EnCana shall utilize remote telemetry equipment to reduce the frequency of well site visits which will partially mitigate the potential for wildlife/vehicle collisions and effects of animal displacement due to increased traffic and human presence. After the bulk of drilling activity is complete, the use of remote telemetry shall reduce traffic volumes by 75% (4 roundtrips/day - 3 light trucks and 1 heavy truck), compared with approximately 16 trips/day in the Figure Four well field if telemetry were not used.

EnCana shall limit the unauthorized public use of access roads via gates/barriers to minimize recreational use of previously isolated areas, thus reducing wildlife/human interactions and potential conflicts. Gates shall be placed at BLM property boundaries and at ridgeline access points. Vehicular access on gated roads shall only be allowed for EnCana employees and contractors visiting wells sites, and by grazing allotment holders. Vehicular access on restricted roads (i.e., BLM-administered lands or through agreements with private landowners) by allotment holders shall only be allowed during authorized grazing use periods for livestock maintenance and transportation. No additional vehicle access (e.g., hunting access) shall be allowed on these properties without BLM permission. Foot travel on BLM lands shall be allowed to all area visitors, however.

The effects of elk and mule deer habitat reduction shall be partially mitigated through interim reclamation of pipeline ROWs and unutilized well pad areas by planting native herbaceous and shrub seed mixtures beneficial to these species. Methods of reclamation are discussed in detail in Chapter 2.

# Water Fowl, Migratory, and Upland Game birds

In order to reduce the possibility of exposure to waste water and drilling fluids, all reserve pits shall be netted to prevent birds from entering contaminated waters. According to the United States Fish and Wildlife Service (USFWS), a maximum mesh size of 1 1/2 inches will allow for snow-loading and will exclude most birds. Netting should be suspended a minimum of 4 to 5 feet from the surface of the pond to prevent the net from sagging into the pond during heavy snow-loads. Side nets shall also be used to prevent ground entry of waterfowl, upland game birds, and other wildlife species.

#### **Raptors**

EnCana or subsequent operator/s shall be responsible for an annual raptor nest inventory in the Figure Four Project Area in areas potentially influenced by drilling and construction activities. The raptor nest inventory shall be completed between April and June of each year. This inventory shall consist of ground surveys to document the activity of previously identified raptor nests as well as to potentially identify additional nests. Data from these annual surveys shall then be provided to EnCana, the USFWS, and the BLM.

EnCana shall commit to retaining live trees and snags within the Project Area as hunting perches for raptors. Prey species also use trees and snags as nesting areas, food sources, and over-wintering

habitat. EnCana shall reclaim disturbed areas and obliterate roads as soon as possible following construction, operation, and completion of project activities.

# **Greater Sage-Grouse**

Based on the existing and potential sage-grouse habitats within and near the Project Area, the following measures shall be implemented to mitigate some of the effects of the Proposed Action on sage-grouse brooding and nesting habitat, as well as leks located within 4 miles of the Project Area:

#### Direct Habitat Loss

All roads and well pads in designated sage-grouse habitat will be minimized to disturb the least amount of habitat.

EnCana shall commit to an interim/post production reclamation program designed to reestablish sagebrush, as well as forb species in all disturbed areas throughout the Project Area. Interim reclamation shall consist of both replanting sagebrush and forbs in disturbed areas as well as treatment/conversion of other brush communities (i.e., serviceberry, oak) to sagebrush. Specific habitat goals will be determined by the BLM.

EnCana shall commit to an off-site mitigation program to compensate for unavoidable disturbances to sage-grouse winter range, as well as nesting (sagebrush steppe habitat) and brooding habitat (riparian habitat). The specific components of the off-site mitigation program were developed by the BLM and the Colorado Division of Wildlife (CDOW) and are as follows:

EnCana shall contribute \$17,000 per year for 3 consecutive years (likely beginning in 2006) to cooperatively fund an evaluation of sage-grouse habitat in Piceance Basin and on the Roan Plateau. The study shall involve hiring summer technicians to obtain and compile baseline information into a Piceance Basin sage grouse habitat assessment to include canopy cover, herbaceous ground cover, plant composition, effective height, and identification of wet areas. This study will involve use of the Daubenmire Method and other measurement techniques and will tell biologists what exists on the ground, what to treat in the future, and how to treat it.

EnCana will provide an additional \$10,000 per year for the life of the field to cooperatively fund habitat improvement projects for sage-grouse to include mechanical and burning treatments, fencing, and habitat evaluations, depending on the prerogative of BLM and CDOW for specific sites. Efforts will be made to make the habitat improvements within or adjacent to the Figure Four Unit. However, this \$10,000 may also be used for off-site mitigation habitat manipulations in different areas of grouse use within the Piceance Basin and Roan Plateau, including, but not limited to, the Magnolia area.

These mitigation requirements apply to EnCana as well as any successive owner/operator of this lease for the operational life of the field. These figures were derived from an estimate of what is needed to provide reasonable and effective habitat assessment and treatment to maintain the sage-grouse population in the Piceance Basin through the period of this field development and operation. It sets aside the need for ongoing complex calculations of sage-grouse habitat directly and indirectly impacted by this development. These measures do not

preclude special reclamation techniques applied to surface disturbance or the advantageous movement of pads, roads and other infrastructure derived from on-site visits.

# Disturbance and Displacement

No ground-disturbing activities shall occur in Sections 7, 19-20, 26-29, and 34-35 from March 1 to July 15. Light non-ground disturbing activities and off road vehicle use associated with gas development activities shall be subject to prior BLM authorization and special daily limitations (see below). Routine on-road vehicle traffic within this area from March 1 to July 15 shall be minimized to the extent practicable and limited to well maintenance and monitoring activities.

To minimize adverse effects to sage-grouse from increased hunting and recreational traffic due to increased road surfaces in the Project Area, numerous gates shall be installed on access roads to prevent unauthorized vehicular and ATV travel. These gates shall be placed at 16 locations, primarily along BLM property boundaries and adjacent to ridgeline access points. Vehicular access on gated roads shall only be allowed for EnCana employees and contractors visiting wells sites, and by grazing allotment holders. Vehicular access on restricted roads (i.e., BLM-administered lands or through agreements with private landowners) by allotment holders shall only be allowed during authorized grazing use periods for livestock maintenance and transportation. No additional vehicle access (e.g., hunting access) shall be allowed on these properties without BLM permission. Foot travel on BLM lands shall be allowed to all area visitors, however.

EnCana shall utilize remote telemetry equipment to reduce the frequency of well site visits, which shall partially mitigate the potential for sage-grouse displacement due to vehicle traffic and human presence. The use of remote telemetry shall reduce well field traffic volumes by 75% (4 roundtrips/day - 3 light trucks and 1 heavy truck), compared with approximately 16 trips/day in the Figure Four well field if telemetry were not used.

In those instances where activities are excepted from the NSO stipulation, or where authorization is otherwise not required, all activities, motorized and non-motorized, within 0.6 mile of a lek shall be excluded from the period of sunset the evening before to 2-hours after sunrise the next morning from March 1 to May 15th. Additionally, there shall be complete activity exclusions from 2-hours before sunset to 2-hours after sunrise during the period of peak hen attendance (as specified by the CDOW).

In those instances where activities are excepted from the Timing Limitation or where authorization is otherwise not required, all repetitive activities, motorized and non-motorized, within 4 miles of a lek in nesting and early brood-rearing habitat shall be severely limited from 0.5-hour before sunrise to 2-hours after sunrise, and 1-hour before sunset to sunset from mid-April through mid-July.

# Direct Mortality

When well pads are constructed in or near sage-grouse habitat, all production facilities (tanks, sheds, and other structures) will be placed on the cut side of the well pad. This facility placement shall discourage raptors from using structures as roosting platforms,

therefore decreasing potential predation on sage-grouse. Similarly, avoid placement of aerial power lines, communication facilities, and other elevated features in sage-grouse habitat to decrease potential raptor predation on sage-grouse. If impractical, bury pipelines or outfit/site/retrofit features to prevent/deter raptor perching.

In order to reduce the possibility of exposure to waste water and drilling fluids, all reserve pits shall be netted to prevent sage-grouse from entering or consuming contaminated waters. According to the USFWS, a maximum mesh size of 1 1/2 inches will allow for snow-loading and will exclude sage-grouse and other bird species. Netting should be suspended a minimum of 4 to 5 feet from the surface of the pit to prevent the net from sagging into the pit during heavy snow-loads. Side nets shall also be used to prevent ground entry.

All fences within 4 miles of a lek shall be fitted with visual devices and sited to minimize grouse collisions.

To prevent vehicle collisions with sage-grouse, all roads in the Project Area shall have a 30 miles per hour speed limit.

# **Endangered Colorado River Fish**

Under the Upper Colorado River Endangered Fish Recovery Program, a one-time fee of \$15.93 per acre-foot is required to compensate for impacts resulting from the depletion. Therefore a one-time fee of \$1,991.25 shall be paid to the National Fish and Wildlife Foundation. This money shall be used along with other funds to provide habitat improvements to aid in species recovery. New water depletions above 125 acre-feet shall require additional consultation with the USFWS.

### **Cultural Resources**

Site 5RB848 shall be avoided by relocation of the main gathering pipeline to the east side of Hunter Creek Road in the vicinity of the site. With implementation of this mitigation measure, no impact to Site 5RB848 shall occur.

#### **Land Use**

Where the project shall affect existing ROWs held by other parties, EnCana shall coordinate with the operator of the affected utility or ROW to minimize disruption of service.

#### Recreation

EnCana is encouraged to schedule and complete project-related construction, well drilling and completion activities prior to the start of the big game hunting seasons in the Vaughn Ranch and particularly the LOV Ranch permit areas to reduce the severity of impacts on permitted hunting outfitters who use these areas and to minimize the potential for displacement of game outside of permit areas. If project related activities are occurring they are encouraged to limit activities in the early morning and later afternoon hours during big game hunting seasons in permitted outfitter areas.

To promote safety for hunters and project workers alike during hunting season, warning signs will be posted along access roads serving active construction and drilling sites to warn hunters of the presence of workers and associated vehicle traffic in the area

#### Visual Resources

All surface facilities shall be painted a natural earth tone color selected by the BLM to reduce visual contrast, unless prohibited by OSHA regulations.

Surface gas gathering pipelines shall not be painted, wrapped or coated, and shall be allowed to weather and blend in with the natural environment.

Night lighting of facilities shall be kept to the minimum required and shall use shielded downcast fixtures to reduce off-site glare. Flaring of completed wells shall be carried out as quickly as possible and shall be screened from distant view using berms, frac tanks or other equipment, and the natural topography to the extent practical.

Cut and fill slopes on well pads and access roads on steep side slopes shall have adequate erosion control materials (blankets, mats, bonded fiber matting, hydro-matting, etc.) installed with recommended seed mix, and color added to blend with surrounding vegetation to reduce contrast until vegetation is established.

#### Socioeconomics

To minimize the potential for wildfires and the demand for local fire protection services during construction and operation, all equipment, including welding trucks, shall be equipped with fire extinguishers and other fire suppression equipment as recommended by the BLM. Project-related employees and contractors shall be informed on the dangers of wild fires. In addition, EnCana will be encouraged to maintain defensible space around its well pads and other production facilities to minimize the potential for wildfires to damage or ignite fires on its facilities. While grasses and forbs shall be re-established in temporarily disturbed areas to minimize erosion, the re-growth of larger shrubs and trees shall be controlled adjacent to project facilities

To assist in public review of this decision, the Environmental Assessment and related appendices are available on BLM, White River Field Office web site: <a href="http://www.co.blm.gov/wrra/figurefour.htm.">http://www.co.blm.gov/wrra/figurefour.htm.</a> Copies of the Geographic Area Plan are also available for review at the BLM, White River Field Office, 73544 Highway 64, Meeker, Colorado.

The decisions made in this plan are appealable when the Applications for Permit to Drill (APDs) are approved by this office. The required 30 day posting period for a few of the APDs was completed during the GAP process. For further information on APD approval dates related to the GAP, periodic consultation with the BLM White River office is recommended via the following phone (970)-878 3800, or email vern\_rholl@co.blm.gov.

In accordance with 43 CFR 3165.3 you may request a State Director Review upon approval of APDs outlined in this GAP. This request must be submitted in writing within 20 business days from date of APD approval. The request should be sent to Colorado State Director, 2850 Youngfield Street, Lakewood, Colorado 80212-7076. The decision of the State Director may then be appealed to the Interior Board of Land Appeals in accordance with 43 CFR 3165.4.

Signature of Authorized Official:

<u>Date Signed</u> 12/03/04

Kent E. Walter Field Manager

Thank C. Walter

White River Field Office